

Title (en)

HIGH DIELECTRIC CONSTANT METAL SILICATES FORMED BY CONTROLLED METAL-SURFACE REACTIONS

Title (de)

METALLSILIKATE MIT HOHER DIELEKTRIZITÄTSKONSTANTE, HERGESTELLT DURCH METALL-OBERFLÄCHENREAKTIONEN

Title (fr)

SILICATES METALLIQUES A CONSTANCE DIELECTRIQUE ELEVEE FORMES PAR REACTIONS METAL-SURFACE MAITRISEES

Publication

EP 1301941 A2 20030416 (EN)

Application

EP 01959012 A 20010718

Priority

- US 0122711 W 20010718
- US 22046300 P 20000720

Abstract (en)

[origin: WO0209167A2] A method of forming an insulation layer on a semiconductor substrate includes modifying a surface of a semiconductor substrate with a metal or a metal-containing compound an oxygen to form an insulation layer on the surface of the semiconductor substrate, wherein the insulation layer comprises the metal or metal-containing compound, oxygen, and silicon such that the dielectric constant of the insulation layer is greater relative to an insulation layer formed of silicon dioxide, and wherein the insulation layer comprises the metal-oxygen-silicon bonds.

IPC 1-7

H01L 21/316

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 0209167A2

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